1: Karsten--99-102 (1916-18) 1935 Jivaro-1
116, 323 (1928-29)

"The ceramic art among the Jibarós, and especially among the Canelos Indians, is brought to a remarkable degree of perfection. The superiority of the Canelos Indians shows itself above all in their way of painting the clay vessels, or more properly speaking, in the ornamental designs with which they decorate them. It may be added at once that on this particular point the pottery to a certain extent varies with different Jibaro tribes. Whereas the tribes of the Upano and the Morona, and similarly the Aguarunas, seldom apply ornamental designs to their clay pots and dishes, the Achuares of the Pastaza ornament theirs in a peculiar way, as we shall presently see, and even in shape their pottery is partly original, probably owing to the relative isolation in which the Achuares have lived.

For the making of their pottery the JIBAROS and Canelos Indians use a special kind of clay which is found only at certain places on the [100] river. At least some tribes, e.g. the Achuares, try to make it more durable and more suitable for its purpose by mixing with it the ashes of burnd bark obtained from certain trees, but in general the clay vessels of these Indians are very fragile. However, certain magical or animistic ideas seem to be associated with the very material used for the making of them. When I asked the Jibaros why only women make pottery, I received the answer, 'The clay is

obtained from the earth and the earth is a woman; hence the women have to make clay vessels.' It is interesting to note on this point that 'clay' in the Jibaro language is nui and 'earth' nunga, from which word also the name of the Earth-mother Nungüi is derived. 'Woman' again, is nua. There can be little doubt that all these words are derived from the same root, a fact that the Jibaro women themselves seem to be aware of. When further we consider that, as we shall presently see, the ornamental designs painted on some clay vessels, have obviously a magical significance, we realize that a whole primitive 'philosophy' is connected with the making of these important utensils.

The technique for making clay vessels is the same as among other primitive South American tribes. No potter's wheel is used. A base of clay is prepared and the vessel is formed by the addition of thin rolls --obtained by the clay being rolled between the hands -- to that base, the intermediate spaces being filled with smaller rolls of clay and smoothed out with the fingers. When complete, the vessel is dried in the sun, whereupon it is painted and lastly fired for a while by placing it on the ground and piling the fuel round it. In this way the Jibaros make for instance the great urns or jars with bulging sides, narrow neck, and wide mouth, in which they keep the manioc substance from which the manioc-beer is prepared. Next to these in importance are the shallow dishes, called pininga; from which the Indians drink the beer and which are used as plates. Normally such a dish contains about one litre, but for the feasts special smaller

dishes are made to be used by those persons who have to fast. The women make with special care those quite small clay pots in which the tobacco juice necessary for the great feasts is kept, and which is only handled by the 'priest' or 'priestess', or by the medicine-men. These pots are called nattípya.

The cooking utensils are mainly of two kinds: the ordinary black cooking pots (ichingana) already mentioned, and the smaller pots called yukúnda in which the Jibaro men prepare tobacco water by boiling the leaves. Since the taking of tobacco juice is always ceremonial, these [[101] pots are also made with special care, at any rate for the feasts, and they are of somewhat different forms, some being short, others tall, as appears from the photographs (Pl. XVIII, 1. and 2).

The Jibaros paint the outside of their muitsa [JKM: large pots in which is kept the manioc-beer] and pininga [JKM: shallow dishes from which beer is drunk] red with roucou (Bixa orellana), inside again they coat them with a special, beautiful, reddish-yellow varnish which they call yukaípi. This varnish is prepared in the following way. From the top of a certain forest tree they obtain, by parting it into small fibres and squeezing out the juice, a clear, glutinous white matter which is boiled in a small clay pot together with the red seeds of the Bixa orellana and some water. Thus the liquid becomes red or reddish-yellow in colour and makes the varnish called yukaípi. When

congealed, it forms a fine glazing upon the surface of the clay dish. In this way the Jibaros not only embellish clay vessels, but also certain wooden objects, especially the shafts of a special kind of lance with points of a jaguar's or bear's leg-bones.

Again, the small black cooking-pots called yukuńda are painted inside with a black polish or varnish called sekaťa. It is a black wax produced by certain wild bees which make their nests in holes in the earth. When warmed up at the fire this wax melts and forms a lustrous varnish. It is the same kind of black polish which the Jibaros apply to their blowguns, to be described later on.

On the other hand, the Jibaros very seldom embellish their clay vessels with ornamental designs or patterns. The only exception I have noticed to this rule, for instance among the Upano and the Santiago tribes, are certain very vague triangular ornaments applied in dark brown colour inside the yukuńda after they have been painted black with sekaťa. It is otherwise with the Achuares on the Pastaza, whose ceramics differ in many respects from those I have found among other Jibaro tribes. Thus the small round clay dishes or cups standing on a foot which are seen on Pl. XVIII, 5. and 6., are not to be met with among any other Jibaro tribe and are, I believe, unique in South America. The Achuares told me that they were formerly used by them as food-plates; now they were no longer used, but had still been preserved as the Indians keep many old things which have gone out of fashion. Upon these plates the Jibaro women

placed different kinds of food when serving their men: on one some boiled manioc was placed, on another some fish, on a third some boiled Indian pepper, etc. As appears from the picture, the eating-cups were painted both inside and outside. Upon a brown bottom, produced by painting the vessel with roucou, [102] certain patterns were applied in white. The use of a white clay-- a clay which, as far as I know, only exists in the country of these Indians -- is a peculiarity in the ornamental art of the Achuares; at any rate I have not seen it anywhere else in Eastern Ecuador or Peru.

In the same way the Indians paint the shallow dishes represented on Pl. XIX, 1. and 2. As is seen, however, these are only ornamented inside, the designs being painted with white clay. The patterns are those customary among the Jibaros, although the technique for painting them is partly different. The designs appearing in the ornamental art of the Jibaros and Canelos Indians are in fact always the same: they either represent human spirits, certain dangerous snakes, certain birds, especially the macaw, or certain insects, as for instance butterflies, millepedes, and scorpions. As to the snakes, such species are mostly represented which for one reason or another particularly inspire the Indians with fear. The snake that plays the most important part in the ornamental art of the Indians--being represented especially on clay vessels and in facial paintings, etc. --is the great water boa or anaconda (Eunectus murinus). Thus the broad snake-like figures appearing in the shallow dish in Plate XIX, 2, represent

the anaconda (pangi), whereas the designs on the other dish (Pl. XIX, 1), and the snake-like figure encircling the outer border of the painted clay cup in Pl. XVIII, 6, represent the very venomous snake ekis (Lachesis, called yamuńga in the Jibaro language). On the foot of the same cup among other things a human spirit and a millepede are represented."

1: Karsten--102-103 (1916-18) 1935 Jivaro-1
116, 323, 531 (1928-29)

"Like the Achuares, the CANELOS INDIANS nearly always apply ornamental designs to their clay vessels, but their ornamental art is easily distinguished from that of the Achuares and even the clay they use is different. The big jars in which they keep the masticated manioc substance (asua) are generally without ornaments and only have the outside painted red with roucou (Bixa orellana). There are, however, exceptions to this rule, as appears from the beautiful, ornamented jar represented on Pl. XX, 1. Among the ornamental designs figures of snakes predominate, the great anaconda (amarun) being the reptile most often represented. Even human spirits with the arms stretched out, birds, tortoises, and certain poisonous insects are represented much in the same way as among the Achuares. Generally the Indians are themselves able to tell which particular reptile, bird, etc. a certain figure represents. Thus the women at once informed me that the brown rings [103] which encircle the big jar on Pl. XX, 1. represent the spots of the great boa, amarun, a monster which has struck the imagination of the primitive Indians more than any other member of the animal world. The smaller dishes from which the manioc-beer is drunk are nearly always ornamented with figures in black or brown colour. White designs are unknown, and the white clay used for the purpose by the Achuares does not exist at all at Canelos. Generally the outside is ornamented; more rarely the dishes have ornamental patterns inside and when they have,

they are always simpler. In the smaller dishes also the snake patterns predominate, poisonous snakes like the Lachesis (called pitalaía by the Canelos Indians) being most often represented. These dishes are called mucahua by the Indians. (See Pl. XIX, 3. 4. 5).

Of particular interest is he small but elaborately ornamented clay dish represented in Pl. XX, 3. and 4. Diminutive cups or dishes of this kind are used by the Jibaros and the Canelos Indians only at the great feasts, a special sacred drink being drunk by means of these small cups. How the manioc-wine is prepared and how it is consumed at the end of the most important feasts will appear from descriptions given later. I only add in this connection that the magical ideas which are associated with the Indian clay vessels in general, appear among other things from the extraordinary care with which the small clay cups used for the drinking of manioc-wine are made and ornamented. The same may be said of the small clay pot in which the Jibaros keep the tobacco juice which is ceremonially given to the principal persons at the great feasts. The vessels used on these occasions must be specially made and painted for each feast, and they must be made by the old woman, the 'priestess', who administers the sacred drinks at the feasts. Not only these, but also the most important of other clay vessels used at the religious feasts have to be specially made.

To the rule that clay vessels shall be made by the women there is, as far as I know,

only one exception: the cooking-pots in which the arrow-poison is boiled must be made by the poison-cook himself, who is a kind of medicine-man. The same holds true of the small pots in which the prepared arrow-poison is kept. As we shall see later on, no woman is allowed to come into any contact with the arrow-poison or the 'sacred' vessels used for its preparation."

2: Stirling--94-95 (1930-1931) 1930 Jivaro -1
116, 317, 323

"Just as the men when in the house spin or weave when they have nothing else to do, so the women are likely to keep themselves busy in making pottery. Considerable care is taken in the locating of outcrops of suitable potters' clay. Selected lumps of rough clay wrapped in bark are placed in baskets and carried to the jivaría. The work of preparing and refining the clay is done within the house. A chunk of clay is placed on a flat slab of wood and pounded with a heavy stone. Impurities, such as small stones and other foreign substances, are picked out by hand. This refined clay is then mixed with a small amount of ash and moistened, after which it is stacked in piles on another wooden slab. One pile is a stiff olive green clay which is used to furnish the main body of the pot; the other pile consists of a rather sloppy yellow clay which is used for thinning. The latter is added to the heavy clay until the proper texture is obtained.

The mixture of the two clays is kneaded together by the potter in the proper proportions and placed in a third pile which is used for building up the pot. Squatting or sitting on the floor, the woman picks up a handful of this clay and, between the palms of the hands or on top of the thigh, she rolls it into a rope 2 or 3 feet in length (pl. 24, a, b). The pot is then built up on a flat slab of wood by a coiling process. As the sides of the vessel rise, each rope of clay is carried around the rim with the right hand, the left hand pinching it flat so as to make it adhere to the coil below (pl. 24, c). When thus pinched into place, the potter from time to time dips a gourd shell into water and with it smooths

down the coil, both on the inside and outside surfaces (pl. 24, d).

After the bowl has been completed it is set inside the house to dry in the shade. At this stage the bowl is sometimes decorated with simple geometric incised designs in the form of wavy or zigzag bands. As a rule, a considerable number of vessels are made and [95] dried at the same time so that a dozen or so pots may be fired simultaneously. There is a variety of shapes, but the vessels may be classified into three types according to use---deep cooking vessels, large storage jars for nijimanche, and small bowls for drinking or eating purposes.

After the drying has been completed preparations are made for firing. Two good-sized logs are laid parallel on the ground about a foot apart. Smaller cross-logs are then put in position, leaving spaces between, of a proper size to admit the vessels which are to be fired, the crosspieces supporting the sides of each vessel when in position. Then smaller pieces of dry wood, preferably rotten wood and dry bark, are piled around and over the bowls (fig. 4). The entire mass is thickly covered with palm leaves and the pile ignited. The evenness of the firing depends largely upon the care with which the fuel has been arranged and the slowness with which it burns.

The firing being completed and the vessels cooled and wiped off, they are ready for painting. The storage vessels and drinking bowls to be used for nijimanche are usually painted a solid red color on the outside by means of achiote mixed with caraña or gum copal. The drinking bowls are painted red on the outside and the inside surface is painted

with designs which are geometric in character or which represent mythologic episodes in the career of Mika, who is the patron of pottery vessels. The Aguaruna cover the interior of their vessels with a white slip on which the designs are painted in red and black, the black color being obtained from charcoal. Caraña is used as a varnish to finish the inside of the bowls.

The clay which is used for pottery making is called mieway. Small drinking vessels are called pininga and when decorated are known as pininga agajmo. The large storage jars, which sometimes have a capacity of 10 gallons, are called mika. Various names are applied to distinguish the many smaller varieties of pottery vessels according to their shape and special use. (For typical forms see pl. 35.)"

4: Up de Graff--206 (1897) 1923 Jivaro
116, 252, 323

"Ranged round the walls are the 'fireplaces'--mere piles of embers without even a hole in the ground--with the grids placed over them. Each wife has her own, on which she does what cooking she is ordered to do. Piled neatly round the fireplaces are the earthenware pots of various sizes and shapes, all with cone-shaped bottoms, the largest the giamanchi containers, which are about four feet in height, with narrow necks and a maximum diameter of three feet. These gigantic vessels are fashioned without the aid of anything resembling a potter's wheel; ropes of clay are rolled in the hands, and the sides of the pot are gradually built up from the ground, the joints being filled in and rubbed smooth until the whole is as perfect in shape, as far as the eye can see, as a modern piece. After being sun-dried they are baked hard in the fire. They are never painted with any design, a practice common among primitive potters."

13: Rivet--252 [4] (no date) 1908 Jívaro
116, 323

The arts are little developed among the Jíbaros. However, their pottery has pleasing shapes and sometimes pretty designs, and the ornaments, which they like to wear, are as remarkable for their elegance as for their strangeness.

28: Tessman--354 [2] (No date) 1930 Jivaro
116, 323, 415

They produce cooking pots (itsinek) with a wide opening (Plate 59, Fig. 8) and pots with a narrower opening for the cooking of massato. The latter ones are called muetsa. Moreover, they have earthenware bowls (pininga) for intoxicating beverages. These pininga usually have the same coloring inside and outside. Their best and most original earthenware product is a bowl-like plate. They are red on the outside, covered with a paste of bixa (ipaku) and the juice of Apocynacee Couma guianensis, lechecaspi L. (naúm). Inside they are decorated with simple patterns (concentric circles, curves, and lines), and they are glazed yellow or green. No other tribe in Eastern Peru makes anything comparable to these plates (see color Plate VII, top). The resin which they use for this is called nétaka. They also have bowls with a double bottom with rattling fruit-shells inside.

34:Harner E-4, 5 (1956-1969)1973 SD9 Jivaro SD9

tamed, both for personal amusement and for trade to the western or frontier Jívaro to obtain steel machetes, axe-heads, firearms, and ammunition.

Technology and Crafts

No single tool can be considered more ubiquitous in Jívaro life than the machete. The machete is the sole garden weeding implement as well as the only tool used for digging up root crops including the staple food, sweet manioc. It is used for woodworking, to dig clay for pottery, to prepare foods and to cut hair, and it is used to fell even the largest tree, although the less common steel axe is preferred for this task when it is available.

Machetes are of two types: the more plentiful *hapa mačit* ("deer machete"), of Ecuadorian manufacture, which was formerly obtained at Macas in exchange for one deer carcass; and the *kayens mačit* (Collins machete), of North American manufacture and preferred by the Jívaro because of its superior efficiency. The *hapa mačit* was introduced first, the Collins implement not reaching the Jívaro until about 1941. During the past few decades, large single-bitted steel axe heads have also been introduced in significant numbers by means of a system of Jívaro trading partners. Such axes are still far less plentiful than machetes, but in great demand because of their superiority over machetes in felling trees. Iron adze blades, which were apparently introduced about the same time as machetes, are possessed by only a very few individuals, but are in demand for finishing canoes and stools. All the types of steel tools are mainly obtained by trade from the western or frontier Jívaro of the Río Upano Valley.

As machetes become worn through years of continual use

34:Harner E-4, 5 (1956-1969)1973 SD9 Jivaro SD9

stone to crush maize for chick feed. The wooden planting and digging sticks used in agricultural work have been mentioned previously.

Vessels are made by the women from clay and gourds. All pottery is manufactured by the method of coil construction and vessels are finished by scraping. Three kinds of clay are used for different types of vessels. Carbonized bark of the *apáčaram* tree is powdered for tempering material in food bowls, while sand temper is used in drinking bowls, fermentation jars, and cooking jars. All vessels except cooking jars are coated with red achiote or black beeswax after firing. Only the interiors of large drinking bowls, the exteriors of miniature drinking bowls, and the interior necks of fermentation jars are ever decorated. Even then, such decoration is usually simple and hastily made, often consisting of unelaborated irregular zigzag and dot patterns in vegetal paint. The one apparent exception is the miniature drinking bowls, which sometimes have intricate and well-executed designs. These, however, are obtained by trade from the Canelos tribe to the north.

The fermentation jars are the largest vessels made, averaging about ten to thirteen gallons in capacity. These jars, covered with a drinking bowl or banana leaf, serve to store the fermenting manioc or chonta palm fruit beer. Next in size are the cooking jars, the largest of which are employed to boil the hallucinogenic *Banisteriopsis* for resident or visiting shamans. The other chief ceramic vessels are food-serving bowls and the two sizes of drinking bowls. Small pottery or gourd jars serve to store the curare blowgun dart poison. One special miniature pottery bowl is used by old men to brew an emetic tea from *Ilex* sp. leaves.

Large long-handled gourds hold water for cooking and

34:Harner E-4, 5 (1956-1969)1973 SD9 Jivaro SD9

refuse. If there is no infant, this will probably be her only duty.

A girl approximately six years or older may have not only the above tasks, but also directly assists her mother in garden work of all kinds, including planting, weeding, and harvesting. When her mother is making pottery, she imitates her by making and firing miniature vessels and also may form and fire miniature dogs. No dolls in human form are produced, however. A boy who may be tempted to work with clay is discouraged by his father, who advises him not to touch it or else the boy's penis will one day stay soft and limp like a coil of clay.

A boy, when about four, begins to learn the art of blowgun hunting. His father gives him a small hollow reed less than a foot long and makes little darts. The child, who at that age tags along after his mother to the garden, uses it to shoot at butterflies. When he is about six, his father presents him with a real miniature blowgun and a dart quiver. Then, while his mother works in the garden, he wanders about, shooting at the hummingbirds coming to feed at the flowers of the manioc plants. Those that he kills, he brings to her to cook, which she does gravely. He is not allowed to eat them himself, it being believed that he cannot kill again if he does so. By approximately nine years of age, his skill normally has advanced to the stage that he is killing larger birds lurking in the trees around the garden. His father then takes him hunting and gives him his first formal instruction in killing game, and has him assist by carrying it home. In the house, the father encourages the development of other male skills by showing approval when the son attempts to make miniature baskets or model houses and rafts.

Post-puberty boys perform most of the tasks of their